

IN THE SPECIFICATION:

Please amend the BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS as follows:

-- In the drawings, Figure 1 is a sectional view of one embodiment of the present invention.

Figure 2 is a section view taken along line 2-2 of Fig. 1 ~~an end view~~ of one embodiment of the present invention.

Corresponding reference characters indicate corresponding parts throughout the several views of the drawings. --

Please delete the redundant recitation of the heading "DETAILED DESCRIPTION OF THE INVENTION" on page 4, line 15.

Please amend the paragraph beginning page 4, line 15 as follows:

-- Figure 1 shows one illustrative embodiment of a fuel pump A of the present invention. The major components of the fuel pump A are an enclosure 100, a piston assembly 34, a coil assembly 21, and a check valve assembly 22. The enclosure 100 comprises a housing 1, a first housing end cap 2, and a second housing end cap 3. The piston assembly 34 comprises a piston end cap 7, a machine ball 17, and a piston 8 acting together as an inertial check valve. A reset spring 10 and a check valve 22 are include to further coordinate the piston assembly. In this embodiment, the first housing end cap 2 and the second housing end cap 3 are made from Delrin®, and the housing 1 is made from metal. It will be appreciated, however, that the housings made be made from other materials such as nylon or Teflon®, or the housings may be made from any rigid material provided the materials selected are capable of withstanding the pressures within the fuel pump A and will not deteriorate in the presence of petroleum based

fuels. The housing 1, the first housing end cap 2, and the second housing end cap 3 are joined together by any suitable means. Conventional fasteners work well for example. Other fastening methods will be apparent to those skilled in the art.--

Please amend the paragraph beginning page 5, line 10 as follows:

-- A filter cap 40 is attached to the first housing end cap 2 by means of matching threads on the filter cap and the first end housing. A filter 43 is located between the filter cap 40 and the first housing end cap 2 and is held in position by a filter spring 41 located between the filter 43 and the filter cap 40 as the spring 41 presses against a filter end plate 42. An O ring 44 is used between the filter cap 40 and the first end housing 2 to seal the interior of the filter cavity. A threaded opening 45 allows fuel connectors (not shown) to be attached to the filter cap 40. --

Please amend the paragraph beginning page 5, line 17 as follows:

-- The first housing end cap 1 is generally cylindrically shaped and includes an annular offset 26 to allow for connection to the housing 1. An annular ridge 27 on the first housing end cap 2 acts as a shoulder to locate the housing 1 onto the first housing end cap 2. ~~A threaded portion 23 on the first housing end cap 2 allows for installation of the fuel pump A onto various types of mounting configurations.~~ A bore 29 and a counter bore 30 provide a channel for fuel flow through the fuel pump A, and the counter bore 30 also acts to help locate and install the piston end cap 7 and the machine ball 17. ~~A pipe thread 24 is located on the axial centerline of the first housing end cap 2 allows for the installation of various fittings which allow fuel lines (not shown) to be attached to the fuel pump A.~~--

Please amend the paragraph beginning page 6, line 5 as follows:

-- The second housing end cap 3 also includes an annular offset 28 to located the housing 1 onto the second housing end cap 3. A wiring raceway 20 is bored into the second housing end cap 3 to allow a set of conductors 19 of a coil assembly 21 to exit the fuel pump A. In the present embodiment, the set of conductors 19 is connected to a microprocessor (not shown) that provides the intermittent electrical impulses that cycle the fuel pump A and thereby oscillate the piston 8 within the fuel pump A to pump fuel. A second bore 32 and a second counter bore 33 in the second housing end cap 3 allow for fuel flow through the fuel pump A and for the installation of the check valve assembly 22 and the reset spring 10. As with the first housing end cap 2, a pipe thread 25 is located on the axial centerline of the second housing end cap 3 allows for the installation of various fittings which allow fuel lines (not shown) to be attached to the fuel pump A. It understood that when the components of the fuel pump A are assembled, there is an axial opening 46 extending through the fuel pump A. --

Please amend the paragraph beginning page 6, line 19 as follows:

-- The coil assembly 21 is positioned between the first housing end cap 2 and the second housing end cap 3. A wire spool 4 of the coil assembly 21 is located within the fuel pump A by a first spacer 5 and a second spacer 6. Each of the spacers 5 and 6 are washers that have axially located openings to allow for the flow of fuel through the fuel pump A. A tube 9 is positioned in axially axial alignment with the bore 29 of the first housing end cap 2 and the second bore 32 of the second housing end cap 3, the tube 9 acting as a guide for the piston 8 as it oscillates within the fuel pump A in reaction to the intermittent energizing of the coil assembly 21 by the microprocessor. --

Please amend the paragraph beginning page 8, line 14 as follows:

-- When the microprocessor energizes the coil assembly 21 by sending an electrical impulse into the set of conductors 19, a solenoid effect is generated that biases the piston 8 away from the piston end cap 7 and toward the check valve assembly 22. The movement of the piston 8 forces fuel through the check valve assembly 22 and through a fuel connector (not shown) that is installed into the pipe threads 25 of the second housing end cap 3. The fuel then continues into the fuel system of the internal combustion engine, eventually entering the cylinders of the engine.--

Please amend the paragraph beginning page 8, line 22 as follows:

-- When the microprocessor stops sending an electrical impulse to energized the coil assembly 21, the coil assembly 21 is de-energized and allows the reset spring 10 to return the piston 8 into its rest position by biasing the piston 8 against the machine ball 17 and the piston end cap 7. As the piston 8 returns to its rest position, the check valve assembly 22 closes to prevent fuel from being pulled back into the fuel pump A by the vacuum created when the piston 8 is biased by the reset spring 10. --